Supplemental Application Form
Air Pollution Control Equipment

DEP USE ONLY	
App. No.:	
EPE No.:	

Applicant Name:
(As indicated on *Permit Application Transmittal Form)*

Section I. Summary Sheet (Make additional copies, if necessary)

Unit Number (1)	Unit Description (2)	Control Equipment		Overall Control Efficiency % (5)	Pollutants Controlled (6)	*Basis (7)	Stack No. (8)
		No. (3)	Type (4)				

** Attach supporting documentation with this form, e.g., stack test data, manufacturer's guarantee, etc.*

Section II: Specific Control Equipment

(Complete the appropriate subsection for each *distinct* piece of control equipment you utilize. You may reproduce the pages of the form as necessary.)

Adsorption Device

1a. Designated Reference Number of Adsorption Unit:

1b. Designated Reference Number of Unit which uses Adsorber:

2. Manufacturer:

3. Model Name & Number:

4. Construction Date: / /

5. Adsorbent:

☐ Activated Charcoal Type:

☐ Other (specify):

6. Number of Beds:

7. Dimensions of Bed

Bed No.1

Thickness in direction of gas flow(inches): Cross-section area (sq. inches):

Bed No.2

Thickness in direction of gas flow(inches): Cross-section area (sq. inches):

Bed No.3

Thickness in direction of gas flow(inches): Cross-section area (sq. inches):

8. Inlet Gas Temperature: ^{o}F or ^{o}C

9. Design Pressure Drop Across Unit: inches H_2O

10. Type of Regeneration

☐ Replacement ☐ Steam ☐ Other (specify):

11. Method of Regeneration

☐ Alternate use of beds ☐ Source shut down ☐ Other (specify):

Describe procedures used to ensure that emissions from regeneration process are treated or minimized:

12. Maximum Operation Time Before Regeneration:

13. Is adsorber equipped with a break-through detector? ☐ Yes ☐ No

14. a) Control Efficiency(s) of Adsorber (%):

b) Collection Efficiency(s) of Adsorber (%):

15. Pollutant(s) Controlled:

Afterburner (Incinerator for Air Pollution Control)

1a. Designated Reference Number of Afterburner:

1b. Designated Reference Number of Unit which uses Afterburner:

2. Manufacturer:

3. Model Name & Serial Number:

4. Construction Date: / /

5. Type of Afterburner: ☐ Thermal ☐ Catalytic ☐ Other (specify):

6. Combustion Chamber Dimensions

Length (inches): Cross-section area (sq. inches):

7. Inlet Gas Temperature: °F *or* °C

8. Operating Temperature of Chamber: °F *or* °C

9. Type of Auxiliary Fuel: Higher Heating Value:

10. a)% Sulfur: b)% Ash: c)% Nitrogen:

11. Maximum Auxiliary Fuel Usage (specify units): a) Hourly:

b) Annually:

12. Number of Burners Per Afterburner:

Burner No. 1 @: BTU per hour

Burner No. 2 @: BTU per hour

Burner No. 3 @: BTU per hour

13. Catalyst Used: ☐ Yes ☐ No

Type of Catalyst:

14. Catalyst Sampling Interval:

15. Heat Exchanger Used: ☐ Yes ☐ No

Type of Heat Exchanger:

Heat Recovery:

16. Gas Flow Rate (scfm):

17. Combustion Chamber Design Residence Time (seconds):

18. Moisture Content of Exhaust Gas (%):

19. a) Control Efficiency of Afterburner (%):

b) Collection Efficiency of Afterburner (%):

20. Pollutant(s) Controlled:

Condenser

1a. Designated Reference Number of Condenser Unit:

1b. Designated Reference Number of Unit which uses Condenser:

2. Manufacturer:

3. Model Name & Number:

4. Construction Date: / /

5. Heat Exchange Area (sq. ft.):

6. Coolant Flow Rate: ☐ Water: gpm ☐ Air: scfm (at 68° F)

☐ Other (specify) : Type: Flow Rate:

7. Gas Flow Rate: scfm (at 68° F)

8. Coolant Temperature (°F): In: Out:

9. Gas Temperature (°F): In: Out:

10. a) Control Efficiency(s) of Condenser:

b) Collection Efficiency(s) of Condenser (%):

11. Pollutant(s) Controlled:

Electrostatic Precipitator

1a. Designated Reference Number of Electrostatic Precipitator:

1b. Designated Reference Number of Unit which uses Electrostatic Precipitator:

2. Manufacturer:

3. Model Name & Serial Number:

4. Construction Date: / /

5. Collecting Electrode Area (sq ft):

6. Gas Flow Rate (scfm):

7. Voltage Across the Precipitator Plates (kv):

8. Resistivity of Pollutants (ohms):

9. Number of Fields in the Precipitator:

10. Grain Loading (grains/scf @ 68° F): a) Inlet: b) Outlet:

11. a) Control Efficiency(s) of Electrostatic Precipitator (%):

b) Collection Efficiency(s) of Electrostatic Precipitator (%):

12. Pollutant(s) Controlled:

Filter

1a. Designated Reference Number of Filter:

1b. Designated Reference Number of Unit which uses Filter:

2. Manufacturer:

3. Model Name & Serial Number:

4. Construction Date: / /

5. Filtering Material:

6. Air to Cloth Ratio (sq ft):

7. Cleaning Method: ☐ Shaker ☐ Reverse Air ☐ Pulse Air
☐ Pulse Jet ☐ Other (specify):

8. Gas Cooling Method: ☐ Ductwork Length (ft): Diameter (inches):
☐ Heat Exchanger ☐ Bleed-in Air ☐ Water Spray ☐ Other (specify):

9. Gas Flow Rate (from source): scfm (at 68? F)

10. Cooling Gas Flow Rate
Bleed-in Air: scfm (at 68? F) Water Spray: gpm

11. Inlet Gas Condition Temperature (?F): Dew Point (?F):

12. Grain Loading (grains/scf @ 68° F): a) Inlet: b) Outlet:

13. Design Pressure Drop Across Unit (inches H_2O):

14. a) Control Efficiency of Filter (%):
b) Collection Efficiency of Filter (%):

15. Pollutant(s) Controlled:

Cyclone

1a. Designated Reference Number of Cyclone:

1b. Designated Reference Number of Unit which uses Cyclone:

2. Manufacturer:

3. Model Name & Serial Number:

4. Construction Date: / /

5. Type of Cyclone: ☐ Single ☐ Multiple

6. Number of Cyclones in Multiple Cyclone:

7. Gas Flow Rate: scfm (at 68° F)

8. Grain Loading (grains/SCF @ 68° F): a) Inlet: b) Outlet:

9. Design Pressure Drop Across Unit (inches H_2O):

10. a) Control Efficiency of Cyclone (%):
b) Collection Efficiency of Cyclone (%):

11. Pollutant(s) Controlled:

Scrubber

1a. Designated Reference Number of Scrubber:

1b. Designated Reference Number of Unit which uses Scrubber:

2. Manufacturer:

3. Model Name & Serial Number:

4. Construction Date: / /

5. Type of Scrubber: ☐ Venturi ☐ Wet Fan

☐ Packed: Packing Material:

Size: Packed Height (inches):

☐ Spray: Number of Nozzles:

Nozzle No. 1 Pressure (psig):

Nozzle No. 2 Pressure (psig):

Nozzle No. 3 Pressure (psig):

Nozzle No. 4 Pressure (psig):

☐ Other (specify): ***(Attach description and sketch with dimensions)***

6. Design Pressure Drop Across the Scrubber (inches H_2O):

7. Type of Flow: ☐ Concurrent ☐ Countercurrent ☐ Crossflow

8. Scrubber Geometry

Length in direction of Gas Flow (ft): Cross Sectional Area (sq ft):

9. Chemical Composition of Scrubbing Liquid:

10. a. Scrubbing Liquid Flow Rate (gpm):

b. Fresh Liquid Make-Up Rate (gpm):

11. Scrubber Liquid: ☐ One Pass ☐ Recirculated

12. Gas Flow Rate: scfm (at 68? F)

13. Inlet Gas Temperature (^{o}F):

14. a) Control Efficiency(s) of Scrubber (%):

b) Collection Efficiency(s) of Scrubber (%):

15. Pollutant(s) Controlled:

Mist Eliminator

1a. Designated Reference Number of Mist Eliminator:

1b. Designated Reference Number of Unit which uses Mist Eliminator:

2. Manufacturer:

3. Model Name & Number:

4. Construction Date: / /

5. Face Velocity (feet per second):

☐ Vertical Flow ☐ Horizontal Flow ☐ Diagonal

6. Design Pressure Drop Across Mist Eliminator (inches H_2O):

7. a) Control Efficiency of Mist Eliminator at:

1 mm Hg: 5 mm Hg: 10 mm Hg:

b) Collection Efficiency of Mist Eliminator (%):

8. Pollutant(s) Controlled:

Other Type of Control Equipment for Degreasing Equipment

1a. Designated Reference Number of Equipment:

1b. Designated Reference Number of Unit which uses Equipment:

2. Manufacturer:

3. Model Name & Serial Number:

4. Construction Date: / /

5. Method of Controls

☐ Refrigerator Chiller ☐ Water Spray ☐ Other (specify):

6. a) Control Efficiency of Other Type of Control Equipment (%):

b) Collection Efficiency of Other Type of Control Equipment (%):

7. Pollutant(s) Controlled:

Other Type of Control Equipment

1a. Designated reference number of other type of control equipment:

1b. Designated reference number of unit which uses other type of control equipment:

2. Manufacturer:

3. Model Name & Serial Number:

4. Construction Date: / /

5. Generic name of other equipment:

6. a) Control efficiency of other type of control equipment (%):

b) Collection efficiency of other type of control equipment (%):

7. Pollutant(s) Controlled: